Before the
Federal Communications Commission
Washington, D.C. 20554

| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| Advanced Television Systems | ) | MB Docket No. 87-268 |
| And Their Impact upon the | ) | |
| Existing Television Broadcast | ) | |
| Service | ) | |
| | ) | |
| | ) | |
| | ) | |

**COMMENTS OF MT. MANSFIELD TELEVISION, INC.**

Mt. Mansfield Television, Inc. ("Mt. Mansfield"), the licensee of WCAX-DT, Burlington, VT, respectfully submits these comments on the Seventh Further Notice ("Notice") issued in the above-captioned proceeding.

These comments are confined solely to the post-transition power limitation proposed for WCAX-DT in Appendix B to the Notice. The Notice (at ¶ 16) seeks comment on "the accuracy of [such] information." Mt. Mansfield requests that the Commission revise that power limit to conform to the parameters set forth in the licensee's second round election on Form 384, as established in the International Bureau's exchange of letters with Industry Canada with respect to post-transition operation of WCAX-DT.

Mt. Mansfield is currently broadcasting on out-of-core DTV channel 53.[1] Because of technical limitations associated with DTV operation on its analog channel (3),

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[1] *See* File No. BLCDT-20061030AQB (license application granted Dec. 14, 2006).

Mt. Mansfield was required to specify a third proposed channel for its post-transition DTV operation. The Commission has assured stations that in doing so they "will be afforded the opportunity for full replication facilities on an in-core DTV channel."[2] Identifying such a channel was quite difficult, given the need for Canadian approval for a new channel pursuant to the requirements of the Letter of Understanding governing border areas,[3] the scarcity of available channels in the congested New England area, the need to accommodate DTV elections by other U.S. broadcasters, and the still uncertain nature of Canadian DTV channel plans. As the Commission is aware, Mt. Mansfield and other Burlington-Plattsburgh market stations have spent many years trying to overcome these difficulties.[4]

As set forth by Mt. Mansfield in its second round DTV election on Form 384 filed on October 31, 2005 (copy attached), extended negotiations between the International Bureau and Industry Canada ultimately led to international clearance for post-transition operation of WCAX-DT on channel 22 with an ERP of 443 kW, at 845.2 meters HAAT (or equivalent). This clearance required a substantial reduction in power from the International Bureau's *original* proposal of 808 kW at that same height, which was accompanied by a report (prepared by WCAX-DT's consulting engineer) demonstrating compliance of that 808 kW proposal with both domestic and international allocation

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2 Report and Order, *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television,* 19 FCC Rcd 18279 ¶ 55 (2004) ("*Second Periodic Review*").

3 Letter of Understanding Between the Federal Communications Commission of the United States of America and Industry Canada Related to the Use of the 54-72 MHz, 76-88 MHz, 174 -216 MHz and 470-806 MHz Bands for the Digital Television Broadcasting Service Along the Common Border (Sept. 2000).

4 For a summary of Mt. Mansfield's earliest efforts in this regard, see Comments of Mt. Mansfield Television, Inc. (June 17, 2002) (MM Docket No. 02-82) (summarizing Mt. Mansfield's prior comments in DTV rulemaking proceedings relating to Canadian coordination issues).

requirements.[5] The substantial reduction to 443 kW was necessary to accommodate Canadian plans for station CBOFT-DT, Ottawa, Ontario, on the same channel. Mt. Mansfield agreed to accept that reduction in order to expedite the Canadian negotiation process and thereby moved forward promptly with needed construction of DTV facilities in the Burlington-Plattsburgh market, resulting in the introduction of DTV service in that market in late 2006. However, as further set forth in WCAX-DT's Form 384 filing, the agreement for that reduction was subject to the further agreement that WCAX-DT would be permitted to increase its power from 443 kW to 550 kW in the event that CBOFT-DT ever increases to post-Canadian transition class VL facilities, in order to minimize the loss of replication resulting from any such increase.

The Commission has strongly encouraged licensees in border areas to work together to resolve international coordination issues, and it has noted that such arrangements "will be accorded great weight in determining final assignments."[6] In this case, as noted above, the maximum power established by those arrangements satisfied both domestic and international spacing requirements. And as the attached engineering statement shows, even at this power the DTV signal on channel 22 will be less robust than Mt. Mansfield's analog signal on channel 3, given the rugged terrain of the Green Mountains. That statement also shows that operation of WCAX-DT at the parameters previously agreed to by Mt. Mansfield, proposed by the International Bureau, and

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5 *See* Letter from Kathryn O'Brien, Chief, Strategic Analysis and Negotiations Division, International Bureau, to Paul Vaccani, Director, Broadcast Applications Engineering, Broadcasting Regulation Branch, Industry Canada, Mar. 15, 2005 (copy attached).

6 *Second Periodic Review* ¶¶ 39-40 & nn.77-78, ¶ 64.

accepted by Industry Canada continues to be consistent with all domestic allocation requirements in light of the facilities proposed in the Seventh Further Notice.[7]

Notwithstanding the results of this international coordination process described in Mt. Mansfield's Form 384, Appendix B of the Seventh Further Notice now proposes to limit WCAX-DT to even lower power (435 kW vs. 443 kW, or potentially 550 kW) and lower height (839 meters vs. 845.2 meters HAAT). Mt. Mansfield is not certain of how the Commission derived these proposed parameters.[8] But they are not required to accommodate any DTV election made by any other U.S. station, and they are inconsistent with the parameters to which Mt. Mansfield agreed in order to permit the International Bureau to reach accommodation with Industry Canada.

Both Congress and the Commission have agreed that the public interest would be served by ensuring that DTV stations have the opportunity to maximize their service areas.[9] Strengthening DTV service, particularly in areas of rugged terrain subject to extreme weather conditions like Vermont, is important in order to provide viewers with

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[7] As set forth in Mt. Mansfield's Form 385 filing, the de minimis conflict with WGBY-TV, Springfield, MA, has been resolved through a negotiated conflict resolution agreement, which includes provision for Mt. Mansfield's operation at both the initial 443 kW power and the contingent 550 kW power.

[8] The tower height in Appendix B appears to correspond to that identified in Mt. Mansfield's original DTV construction permit for pre-transition operation on channel 53. However, that proposal was modified to accommodate the mounting of an FM antenna for Vermont Public Radio's facilities (and associated RF radiation limits), by application granted in September 2006. File No. BMPCDT-20060818ABG. The power limit in Appendix B appears to reflect a "dipole factor modification." Notice app. B, p. 52. Such a modification would be inconsistent with the staff's earlier rejection of Mt. Mansfield's proposed application of such a factor. *See* Letter from Clay C. Pendarvis to Mt. Mansfield Television, Inc. at 2, Oct. 28, 2003 (File No. BPCDT-19991020ACA) (application for review pending).

[9] *See, e.g.,* 47 U.S.C. §§ 336(f)(1)(D), 336(f)(7)A)(ii); *Establishment of a Class A Television Service,* 15 FCC Rcd 6355 ¶¶ 51-56 (2000); *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service,* 13 FCC Rcd 7418 ¶¶ 58, 79 (1998) (rules changed to provide "opportunities for stations to maximize their DTV coverage and service"); *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service,* 14 FCC Rcd 1348 ¶ 48 (1998) (Commission decision made "to ensure that the largest number of parties would have a fair opportunity to seek an increase in their DTV facilities").

access to free over-the-air television service, including news and emergency information. The power limits negotiated between the International Bureau and Industry Canada fulfill this policy and provide for the best DTV service consistent with interference protections. Reducing those parameters, as reflected in Appendix B, would be inconsistent with these public interest objectives without providing any offsetting public interest benefits.

For the foregoing reasons, Mt. Mansfield urges the Commission to amend its Appendix B associated with the proposed DTV Table of Allotments to authorize post-transition operation of WCAX-DT on channel 22 in accordance with the technical parameters established in the agreement with Industry Canada: "443 kW ERP and 845.2 m HAAT or equivalent," with WCAX-DT "entitled to increase its ERP to 550 kW . . . [i]n the event that DTV channel 22 in Ottawa ever increases to post-transition class VL facilities as specified in Table 4.3.2 of the DTV LOU."

Respectfully submitted,

William R. Richardson, Jr.
Jack N. Goodman

WILMER CUTLER PICKERING
HALE AND DORR LLP
1875 Pennsylvania Avenue, NW
Washington, D.C. 20006
(202) 663-6000

*Counsel for Mt. Mansfield Television, Inc.*

January 25, 2007

# FCC FORM 384
# DIGITAL CHANNEL ELECTION FORM
# SECOND ROUND ELECTION

## FILED BY MT. MANSFIELD TELEVISION, INC.
## FILED 10/31/2005

| Federal Communications Commission<br>Washington, D.C. 20554 | Approved by OMB<br>3060-1074 (October 2004) | FOR FCC USE ONLY |
|---|---|---|
| **FCC 384** | | |
| **DIGITAL CHANNEL ELECTION FORM<br>SECOND ROUND ELECTION**<br><br>**Must Be Filed by:**<br><br>Please Read INSTRUCTIONS Before Completing This Form | | FOR COMMISSION USE ONLY<br>FILE NO.<br>BSRECT - 20051031AEX |

**Section I - General Information**

**Licensee/Permittee Information**

| | | | |
|---|---|---|---|
| 1. | Legal Name of the Licensee/Permittee<br>MT . MANSFIELD TELEVISION, INC. | | |
| | Mailing Address<br>PO BOX 608 | | |
| | City<br>BURLINGTON | State or Country (if foreign address)<br>VT | ZIP Code<br>05402 - 0608 |
| | Telephone Number (include area code)<br>8026526300 | E-Mail Address (if available)<br>TEFFNER@WCAX.COM | |

**Station / Facility Information**

| | | |
|---|---|---|
| 2. | FCC Registration Number<br>0003644176 | |
| | Call Sign<br>WCAX-TV | Facility ID Number<br>46728 |
| | Community of License: City<br>BURLINGTON | State<br>VT |
| 3. | **Currently Assigned Channels:** | |
| | a. DTV Channel: 53 ☐ Not Applicable | |
| | b. NTSC Channel: 3 ☐ Not Applicable | |

**Contact Information (if different from licensee/permittee)**

| | | | |
|---|---|---|---|
| 4. | Contact Representative<br>WILLIAM R. RICHARDSON | Firm or Company Name<br>WILMER CUTLER PICKERING HALE AND DORR | |
| | Mailing Address<br>2445 M STREET NW | | |
| | City<br>WASHINGTON | State or Country (if foreign address)<br>DC | ZIP Code<br>20037 - |
| | Telephone Number (include area code)<br>2026636038 | E-Mail Address (if available)<br>WILLIAM.RICHARDSON@WILMERHALE.COM | |

**Purpose of Form:**

5. The purpose of the channel election process is for television broadcast licensees and permittees to select an in-core channel (i.e., channels 2 through 51) for their post-transition DTV operation. The purpose of the Second Round Election Form is for licensees/permittees without a currently assigned in-core channel, as well as those licensees that released post-transition rights to their only assigned in-core channel(s) in the first round, to make a channel election.
**(SELECT ONE)**

a. ◉ Channel Election
b. ○ Amendment

**Section II - CHANNEL ELECTION**

All television broadcast licensees and permittees participating in the digital channel election process are required to file a channel election form. Licensees/permittees that do not submit a required channel election form by the deadline on page one will be assigned a channel by the Commission for post-transition DTV operation.

**Second Round Channel Election:**

| | | | |
|---|---|---|---|
| 1. | **Channel Election: (SELECT ONE)** | | |
| | a. ◉ | Licensee/permittee makes the following channel election | Indicate number of in-core channel preference for final DTV operation based on available channels here. 22 |
| | b. ○ | Licensee/permittee has entered into a Negotiated Channel Election Arrangement and, accordingly, makes the following channel election, subject to Commission approval:<br><br>**Licensee/permittee must complete Schedule A** | Indicate in-core channel number for final DTV operation here. |
| | c. ○ | Licensee/permittee requests that the Commission determine and select a "best available" channel for the licensee/permittee in this round, and hereby surrenders any rights to elect a channel for a post-transition DTV channel. | |
| 2. | **Contingent Channel Election: (SELECT ONE). (NOTE:** The contingent channel election will become available for selection ONLY if the licensee/permittee chooses to resolve an interference conflict by rescinding its original second round channel election as part of a negotiated conflict resolution agreement with another licensee/permittee.) | | |
| | a. ○ | Licensee/permittee makes the following contingent channel election | Indicate number of in-core channel preference for final DTV operation based on available channels here. |
| | b. ○ | Licensee/permittee requests that the Commission determine and select a "best available" contingent channel for the licensee/permittee in this round in the event a contingent channel election becomes necessary, and hereby surrenders any rights to elect a channel for a post-transition DTV channel in this circumstance. | |
| **International Coordination:** | | | |
| 3. | Is the licensee/permittee electing a channel that is subject to a pending international coordination issue?<br><br>If yes, licensee/permittee must attach an explanation as an Exhibit to this form. | | ○ Yes ◉ No<br><br>[Exhibit 1] |

**Section III**

I certify that the statements in this form are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this election form. (See Section 304 of the Communications Act of 1934, as amended.)

| | |
|---|---|
| Typed or Printed Name of Person Signing<br>THEODORE J. TEFFNER | Typed or Printed Title of Person Signing<br>THEODORE J. TEFFNER |
| Signature | Date<br>10/31/2005 |

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

## Exhibits

**Attachment 1**

| Description |
| --- |
| Second Round Election Exhibit 1 |

# Mt. Mansfield Television, Inc.
# Exhibit to FCC Form 384
# Second Round DTV Channel Election

## International Coordination

As a result of extended negotiations between the International Bureau and Industry Canada, Canadian consent was obtained for the post-*U.S.* transition operation of WCAX-DT on channel 22 with an ERP of 443 kW. Canadian approval for the use of channel 22 has allowed Mt. Mansfield to begin construction of digital facilities that will be shared by all licensees in the Burlington-Plattsburgh DMA. In the event that, following the *Canadian* transition, Station CBOFT-DT, Ottawa, increases its facilities, Canadian consent has been given for WCAX-DT to then increase its ERP to 550 kW. *See* Letter from James Ballis to P. Vaccani, dated June 16, 2005 (Attachment A); Letter from P. Vaccani to Kathryn O'Brien, dated September 27, 2005 (Attachment B).

## Contingent Channel Election

Mt. Mansfield is not making a contingent channel election. No channel other than channel 22 has received Canadian coordination for use in Burlington, VT, following the U.S. DTV transition. During the negotiations between the Commission and Industry Canada, a number of other channels were considered, but Canadian agreement could be obtained only for channel 22, and that agreement required Mt. Mansfield to accept a substantial reduction of power. Based on the multiplicity of Canadian used and unused NTSC and DTV allotments preserved in the Letter of Understanding between the Commission and Industry Canada, and in light of Mt. Mansfield's experiences in these negotiations, it would be very difficult to find another channel which could receive Canadian coordination, permit timely DTV deployment by all licensees in this market, and ensure anything close to replication of Mt. Mansfield's analog signal.

# Mt. Mansfield Television, Inc.
# Exhibit to FCC Form 384
# Second Round DTV Channel Election

**ATTACHMENT A**

Letter from James Ballis to P. Vaccani, dated June 16, 2005

Federal Communications Commission
Washington, DC 20554

International Bureau

**REGISTERED MAIL-RETURN RECEIPT REQUESTED**

Mr. P. Vaccani, Director
Broadcast Applications Engineering
Broadcasting Regulation Branch
Industry Canada
Jean Edmonds Tower North
300 Slater Street
Ottawa, Ontario, Canada K1A 0C8

June 16, 2005

Dear Mr. Vaccani:

This is in reply to your letter dated February 18, 2005, the Commission's letter dated March 15, 2005, and subsequent emails concerning the following proposals for Digital Television broadcast stations. It is the Commission's understanding based on recent conversations and emails with members of your staff that Industry Canada has no objection to the facilities for WCAX-DT in Burlington, VT as listed below, provided the Commission likewise has no objection to Canadian DTV channel 22 in Ottawa, ON and the Canadian allotment changes listed below. The Commission has no objection to the Canadian channels listed below and will proceed to implement the changes in our database for WCAX-DT in Burlington upon written confirmation from your Administration. Please be aware that WCAX-DT will operate on DTV channel 53 during the digital transition phase in accordance with its LOU allotted facilities and will switch to DTV channel 22 for post-transition operation.

1) Construct a new television broadcast station (x)
   Modify an existing television broadcast station ()
2) City, Province: Ottawa, ON
3) Call letters: CBOT-DT
4) Transmitter location: 45-30-11 North Latitude
   75-51-02 West Longitude
5) Channel number: 25 Class: VL *(L1)
6) Visual Effective Radiated Power: 165 kW
7) Antenna:
   Radiation Center above mean sea level : 472.4 m
   Antenna height above average terrain(3-16 km) : 333 m
   Horizontal directivity pattern: Directional
   Polarization: Horizontal, 0.5° electrical beam tilt
   Make & Model: Alan Dick & Co. Ltd. (6 bays of 3 panels)

*(L1) Limited to -2dB to Syracuse, NY after Transition.

1) Construct a new television broadcast station (x)
   Modify an existing television broadcast station ()
2) City, Province: Ottawa, ON
3) Call letters: CBOFT-DT
4) Transmitter location: 45-30-11 North Latitude
   75-51-02 West Longitude
5) Channel number: 22 Class: VL
6) Visual Effective Radiated Power: 165 kW
7) Antenna:
   Radiation Center above mean sea level : 472.4 m
   Antenna height above average terrain(3-16 km) : 333 m
   Horizontal directivity pattern: Directional
   Polarization: Horizontal, 0.5° electrical beam tilt
   Make & Model: Alan Dick & Co. Ltd. (6 bays of 3 panels)

1. City, State: Burlington, VT
2. Transmitter Location: 44-31-32.6 North Latitude
   72-48-55.1 West Longitude
3. Call Sign: WCAX-DT
4. Channel Number: 22
5. Effective Radiated Power: 443 kW *(L2)
6. Height Above Average Terrain: 845.2 meters
7. Radiation Center Above Mean Sea Level: 1269.4 meters
8. Antenna System: Non-Directional
   Make & Model: Dielectric TUP-O4/C4SP-10/40H-2-R
   Polarization: Horizontal, 1.25° electrical beam tilt

*(L2) WCAX-DT in Burlington is limited to 443kW ERP and 845.2m HAAT or the equivalent. DTV channel 22 in Ottawa will remain at transition facilities until the digital transition is implemented. In the event that DTV channel 22 in Ottawa ever increases to post-transition class VL facilities as specified in Table 4.3.2 of the DTV LOU, WCAX-DT in Burlington will be entitled to increase its ERP to 550kW.

| Location | Delete | Add |
|---|---|---|
| Mont-St-Michel, QC (CBFT-DT-9)<br>46-46-23 NL/75-18-24 WL | 22 B | 23 B |
| Kingston, ON (CBLFT-DT-14)<br>44-17-22 NL/76-28-50 WL | 22 C | 65 C |
| McArthur's Mills, ON (CBOT-DT-5)<br>45-05-18 NL/77-38-50 WL | 22 A | 31 A |
| Lac Etchemin, QC (DTV)<br>46-23-00 NL/70-37-00 WL | 22 A | 30 A |

| | | |
|---|---|---|
| Shawinigan, QC (DTV)<br>46-33-00 NL/72-45-00 WL | 22 B | 30 B |
| Bolton Est, QC (DTV)<br>45-03-44 NL/72-17-54 WL | 23 B | 16 B |

The Commission has no objection to the above proposals and will amend our database accordingly.

Sincerely,

James Bally

Kathryn O'Brien
Chief, Strategic Analysis and Negotiations Division
International Bureau

# Mt. Mansfield Television, Inc.
# Exhibit to FCC Form 384
# Second Round DTV Channel Election

**ATTACHMENT B**

Letter from P. Vaccani to Kathryn O'Brien, dated September 27, 2005

Industry Canada Industrie Canada

300 Slater Street
Ottawa, Ontario
K1A 0C8



6128-5 (DBC-E)

SEP 27 2005

Ms. Kathryn O'Brien
Chief, Strategic Analysis and Negotiations Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554, U.S.A.

Dear Ms. O'Brien:

This is in reply to your letter dated June 16, 2005 concerning the following Digital Television proposals:

| | | |
|---|---|---|
| 1. | City, Province: | Ottawa, ON |
| 2. | Transmitter Location: | 45-30-11 North Latitude<br>75-51-02 West Longitude |
| 3. | Call Sign: | CBOT-DT |
| 4. | Channel Number: | 25 VL *(L1) |
| 5. | Effective Radiated Power: | 165 kW |
| 6. | Height Above Average Terrain: | 333 meters |
| 7. | Radiation Center Above Mean Sea Level: | 472.4 meters |
| 8. | Antenna System: | Directional |
| | Make & Model: | Alan Dick & Co. Ltd. (6 bays of 3 panels) |
| | Polarization: | Horizontal, 0.5° electrical beam tilt |

*(L1) Limited to -2dB to Syracuse, NY after Transition

| | | |
|---|---|---|
| 1. | City, Province: | Ottawa, ON |
| 2. | Transmitter Location: | 45-30-11 North Latitude<br>75-51-02 West Longitude |
| 3. | Call Sign: | CBOFT-DT |
| 4. | Channel Number: | 22 VL |
| 5. | Effective Radiated Power: | 165 kW |
| 6. | Height Above Average Terrain: | 333 meters |
| 7. | Radiation Center Above Mean Sea Level: | 472.4 meters |
| 8. | Antenna System: | Directional |
| | Make & Model: | Alan Dick & Co Ltd. (6 bays of 3 panels) |
| | Polarization: | Horizontal, 0.5° electrical beam tilt |

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| | |
|---|---|
| 1. City, State: | Burlington, VT |
| 2. Transmitter Location: | 44-31-32.6 North Latitude<br>72-48-55.1 West Longitude |
| 3. Call Sign: | WCAX-DT |
| 4. Channel Number: | 22 |
| 5. Effective Radiated Power: | 443 kW *(L2) |
| 6. Height Above Average Terrain: | 845.2 meters |
| 7. Radiation Center AMSL: | 1269.4 meters |
| 8. Antenna System: | Non-Directional |
| Make and Model: | Dielectric TUP-O4/C4SP-10/40H-2-R |
| Polarization: | Horizontal, 1.25° electrical beam tilt |

*(L2) Limited to 443 kW ERP and 845.2 m HAAT or equivalent. DTV channel 22 in Ottawa will remain at transition facilities until the digital transition is implemented. In the event that DTV channel 22 in Ottawa ever increases to post-transition class VL facilities as specified in Table 4.3.2 of the DTV LOU, WCAX-DT in Burlington will be entitled to increase its ERP to 550 kW.

| | Channel Number | |
|---|---|---|
| Location | Delete | Add |
| Mont-St-Michel, QC (CBFT-DT-9)<br>46-46-23 NL ; 75-18-24 WL | 22 B | 23 B |
| Kingston, ON (CBLFT-DT-14)<br>44-17-22 NL ; 76-28-50 WL | 22 C | 65 C |
| McArthur's Mills, ON (CBOT-DT-5)<br>45-05-18 NL ; 77-38-50 WL | 22 A | 31 A |
| Lac Etchemin, QC (DTV)<br>46-23-00 NL ; 70-37-00 WL | 22 A | 30 A |
| Shawinigan, QC (DTV)<br>46-33-00 NL ; 72-45-00 WL | 22 B | 30 B |
| Bolton Est, QC (DTV)<br>45-03-44 NL ; 72-17-54 WL | 23 B | 16 B |

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In reply, we wish to confirm that the Department has no objection to the proposed channel 22 operation for WCAX-DT Burlington. Our database will be amended to reflect the above-noted changes.

Yours truly,

for P. Vaccani
Director
Broadcast Applications Engineering

**LETTER FROM KATHRYN O'BRIEN**
**CHIEF, STRATEGIC ANALYSIS & NEGOTIATIONS DIVISION**
**INTERNATIONAL BUREAU**
**FEDERAL COMMUNICATIONS COMMISSION**

**TO PAUL VACCANI, DIRECTOR**
**BROADCAST APPLICATIONS ENGINEERING**
**BROADCASTING REGULATION BRANCH**
**INDUSTRY CANADA**

**DATED 03/15/05**

Federal Communications Commission
Washington, DC 20554

International Bureau

**REGISTERED MAIL-RETURN RECEIPT REQUESTED**

Mr. Paul Vaccani, Director
Broadcast Applications Engineering
Broadcasting Regulation Branch
Industry Canada
Jean Edmonds Tower North
300 Slater Street
Ottawa, Ontario, Canada K1A 0C8

March 15, 2005

Dear Mr. Vaccani:

The Montreal-Vermont region is a notoriously difficult area to assign new television stations or make modifications to existing operations due to the prevalence of existing operations. We find that the proposed operating facilities of DTV channel 20 for CBMT-DT in Montreal causes a marked increase in interference to the population served by analog station WVTB channel 20 in St. Johnsbury, VT. Our Vermont Educational DTV stations, of which WVTB and WETK are included, have for years been attempting to negotiate facility changes. Therefore, in an effort to accommodate all parties involved and serve to improve broadcasting services on both sides of the border, we would be willing to approve the Montreal operation at the facilities listed below and eventual unlimited full-power class VU facilities, if Industry Canada would likewise have no objection to the DTV proposals for WVTB-DT in St. Johnsbury, WETK-DT in Burlington, and WCAX-DT in Burlington, VT as listed below. We greatly appreciate your consideration of this request. Therefore, in accordance with the 2000 USA-Canada DTV LOU, the Commission submits the following Digital Television applications for your evaluation:

1. City, State: Montreal, QC
2. Transmitter Location: 45-30-20 North Latitude
   73-35-32 West Longitude
3. Call Sign: CBMT-DT
4. Channel Number: 20 Class: VU
5. Effective Radiated Power: 107 kW
6. Height Above Average Terrain: 300 meters
7. Radiation Center Above Mean Sea Level: 327.1 meters
8. Antenna System: Non-Directional
   Make & Model: Kathrein K 723147 (16 bays of 4 panels each)
   Polarization: Horizontal, 0.7° electrical beam tilt

1. City, State: St. Johnsbury, VT
2. Transmitter Location: 44-34-16 North Latitude
   71-53-39 West Longitude
3. Call Sign: WVTB-DT
4. Channel Number: 18
5. Effective Radiated Power: 75 kW
6. Height Above Average Terrain: 592.4 meters
7. Radiation Center Above Mean Sea Level: 1023 meters
8. Antenna System: Non-Directional
   Make & Model: Andrew ATW22H4-HTO-18S
   Polarization: Horizontal, 1° electrical beam tilt

1. City, State: Burlington, VT
2. Transmitter Location: 44-31-32 North Latitude
   72-48-51 West Longitude
3. Call Sign: WETK-DT
4. Channel Number: 32
5. Effective Radiated Power: 90 kW
6. Height Above Average Terrain: 844 meters
7. Radiation Center Above Mean Sea Level: 1266.4 meters
8. Antenna System: Non-Directional
   Make & Model: Dielectric TFU-14GTH-R 04
   Polarization: Horizontal, 1.0° electrical beam tilt

1. City, State: Burlington, VT
2. Transmitter Location: 44-31-32.6 North Latitude
   72-48-55.1 West Longitude
3. Call Sign: WCAX-DT
4. Channel Number: 22 (with deletion of DTV 53)
5. Effective Radiated Power: 808 kW
6. Height Above Average Terrain: 845.2 meters
7. Radiation Center Above Mean Sea Level: 1269.4 meters
8. Antenna System: Non-Directional
   Make & Model: Dielectric TUP-O4/C4SP-10/40H-2-R
   Polarization: Horizontal, 1.25° electrical beam tilt

We await your comments regarding the above proposals.

Sincerely,

James Ball

for Kathryn O'Brien
Chief, Strategic Analysis and Negotiations Division
International Bureau

INTERNATIONAL LONGLEY-RICE ANALYSIS
FOR THE PROPOSED DTV OEPRATION OF
WVTB-DT, ST JOHNSBURY, VERMONT
CHANNEL 18 75 KW ERP 592 METERS HAAT
FEBRUARY 2005

| Channel | Call | City/State | Distance km | Status | Baseline | New Interference |
|---|---|---|---|---|---|---|
| 18 | QU-DT-195 | QuTbec, QC | 255.1 | AL | 2.85 % | 0.2 % |
| 19 | QU-DT-213 DT[1] | Sherbrooke, QC | 92.1 | TD | 0 | 0 |
| 18 | QU-TV-410 | Baie St-Paul, QC | 337.6 | AL | 0 | 0 |
| 18 | QU-TV-511 | Shawinigan, QC | 229.8 | AL | 1.1 % | 1.3 % |
| 18 | QU-DT-176 | Mont-Laurier, QC | 356.5 | AL | 10.6 % | 0.7 % |
| 14 | QU-TV-513 | Sherbrooke, QC | 92.1 | AL | 0 | 0 |

[1]These facilities are marked as "Tentative Deletion".

# INTERNATIONAL LONGLEY-RICE ANALYSIS FOR THE PROPOSED DTV OEPRATION OF WETK-DT, BURLINGTON, VERMONT CHANNEL 32 90 KW ERP 844 METERS HAAT FEBRUARY 2005

| Channel | Call | City/State | Distance km | Status | Baseline | New Interference |
|---|---|---|---|---|---|---|
| 32 | CBMT-4 | Thetford-Mines, QC | 208.1 | OP | 0 | 0 |
| 32 | CITS-TV-1[1] | Ottawa, ON | 229.8 | TO | 0.24 % | 0 |
| 31 | QU-DT-106[2] | Ayer's Cliff, QC | 96.6 | AL | 0 | 2.7 % |
| 32 | QU-TV-528 | Ste-Agathe-Des-Monts, QC | 201.4 | AL | 19.8 % | 3.5 % |
| 32 | CBLFT-14 | Kingston, ON | 292.3 | OP | 0 | 0 |
| 24 | CIVS-TV-1 | Sherbrooke, QC | 98.3 | OP | 0 | 0 |

[1]Longley-Rice analysis of CITS-TV-1 is based on 55 kW at 202.3 meters HAAT.

[2]Analysis by Joseph Sadoun indicates that a permissible interfering contour is established using a 16 dB F/B ratio as stated in Appendix 7 of the BPR Part 7 for stations operating on channels 14 to 69 for protection of QU-DT-106

# Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

## U.S. and Canadian Allocation Conditions for WCAX-DT as Channel D22

Study coordinates: N 44-31-36.0
W 72-48-37.0

Channel(s) studied: D22

Proposed station class: VL

Safety zone: 120.0 km

Database built 050131

| Call / City | Stat | Chanl | File number / St Co Clas | ERP / Fac. ID | HAAT / AMSL | Latitude / Longitude | Br-to / -from | Dist / Mrgn | Reqd / Flag |
|---|---|---|---|---|---|---|---|---|---|
| | | 14+ | | 0.001 | 0 | N 45-24-00.0 | 36.3 | 121.0 | 97.0 |
| SHERBROOKE | | | QU CA C | 97384 | 0 | W 71-54-00.0 | 216.9 | 24.00 | |
| CBFT10 | LIC | 15o | | 1.740 | 222 | N 45-54-42.0 | 327.1 | 184.6 | 90.0 |
| STE-ADELE | | | QU CA A | 97449 | 0 | W 74-06-44.0 | 146.1 | 94.56 | |
| WNPI-TV | LIC | 18o | BMLET19910906KG | 661.0 | 243 | N 44-29-30.0 | 269.3 | 162.4 | 97.0 |
| NORWOOD | | | NY US C | 62137 BT | 599 | W 74-51-29.0 | 87.9 | 65.44 | |
| | | 18+ | | 0.001 | 0 | N 44-00-54.0 | 110.6 | 157.2 | 90.0 |
| FRYEBURG | | | ME US A | 97578 | 0 | W 70-58-48.0 | 291.9 | 67.22 | |
| WNPI-TV | CP | 18o | BPET20030109AAJ | 661.0 | 243 | N 44-29-29.0 | 269.3 | 162.4 | 97.0 |
| NORWOOD | | | NY US C | 62137 BT | 599 | W 74-51-26.0 | 87.9 | 65.38 | |
| WCDC-TV | LIC | 19o | BLCT19810105KE | 447.0 | 637 | N 42-38-14.0 | 187.8 | 211.8 | 98.0 |
| ADAMS | | | MA US VU | 76419 | 1116 | W 73-10-07.0 | 7.6 | 113.8 | |
| W19BR | LIC | 19+ | BLTTL19990811JG | 0.730 | 83 | N 44-19-25.0 | 233.7 | 38.08 | 90.0 |
| MONKTON | | | VT US A | 30187 DA | 124 | W 73-12-04.0 | 53.4 | -51.9 | SHORT |
| W19BR | CP | 19+ | BPTTA20040310ACW | 63.90 | 187 | N 44-18-46.0 | 231.2 | 37.87 | 91.0 |
| MONKTON | | | VT US B | 30187 DA | 230 | W 73-11-10.0 | 50.9 | -53.1 | SHORT |
| Eligible for Class A status | | | | | | | | | |
| | | 19- | | 0.001 | 0 | N 46-03-00.0 | 352.2 | 170.9 | 91.0 |
| SOREL | | | QU CA B | 97661 | 0 | W 73-07-00.0 | 172.0 | 79.94 | |
| no_call | | 19 | | 10.00 | 100 | N 45-02-00.0 | 291.1 | 161.9 | 90.0 |
| CORNWALL | | | ON CA A | 0 | 0 | W 74-44-00.0 | 109.7 | 71.88 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| WVTB | LIC | 20- | BLET19910816KE | 589.0 | 592 | N 44-34-16.0 | 85.8 | 73.41 | 100.0 |
| ST. JOHNSBURY | | | VT US VU | 69940 DABT | 1023 | W 71-53-39.0 | 266.5 | -26.6 | SHORT |

## Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

### U.S. and Canadian Allocation Conditions for WCAX-DT as Channel D22

| Call / City | Stat | Chanl | File number / St Co Clas | ERP / Pac. ID | HAAT / AMSL | Latitude / Longitude | Br-to / -from | Dist / Mrgn | Reqd / Flag |
|---|---|---|---|---|---|---|---|---|---|
| W20BA | LIC | 20o | BLTT19921215IG | 9.000 | 106 | N 44-54-14.0 | 285.1 | 169.1 | 90.0 |
| MASSENA | | | NY US A | 47720 | 162 | W 74-53-01.0 | 103.7 | 79.13 | |
| Eligible for Class A status | | | | | | | | | |
| CBVT9 | LIC | 21o | | 1.600 | 286 | N 46-06-53.0 | 31.5 | 208.2 | 95.0 |
| THETFORD-MINES | | | QU CA B | 96814 | 0 | W 71-24-24.0 | 212.5 | 113.2 | |
| | | 21- | | 0.001 | 0 | N 45-02-00.0 | 291.1 | 161.9 | 92.0 |
| CORNWALL | | | ON CA A | 98557 | 0 | W 74-44-00.0 | 109.7 | 69.88 | |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| WPXG | LIC | 21+ | BLCT20030926AOY | 2300 | 344 | N 43-11-04.0 | 140.7 | 191.6 | 110.0 |
| CONCORD | | | NH US VU | 48406 DABT | 509 | W 71-19-12.0 | 321.7 | 81.59 | |
| CFCF-TV | APP | D21o | BPFS20041027ABH | 550.0 | 300 | N 45-30-20.0 | 331.0 | 124.8 | 101.0 |
| MONTREAL | | | QU CA VU | 163738 | 331 | W 73-35-32.0 | 150.4 | 23.82 | |
| CFCF-TV | | D21 | | 107.0 | 300 | N 45-30-20.0 | 331.0 | 124.8 | 101.0 |
| MONTREAL | | | QU CA VU | 0 | 0 | W 73-35-32.0 | 150.4 | 23.82 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| WVNY | LIC | 22+ | BLCT19810108KE | 1000 | 837 | N 44-31-40.0 | 349.9 | 0.125 | 296.0 |
| BURLINGTON | | | VT US VU | 11259 | BT 1264 | W 72-48-58.0 | 169.9 | -296 | SHORT |
| WWLP | LIC | 22o | BLCT19841128KJ | 3390 | 268 | N 42-05-05.0 | 178.1 | 271.4 | 296.0 |
| SPRINGFIELD | | | MA US VU | 6868 | DA 346 | W 72-42-14.0 | 358.1 | -24.6 | SHORT |
| WTVU-LP | LIC | 22o | BLTTL19990816JB | 21.40 | 106 | N 43-03-30.0 | 239.9 | 315.2 | 197.0 |
| SYRACUSE | | | NY US B | 617 | DA 224 | W 76-10-00.0 | 57.6 | 118.2 | |
| | | 22o | | 0.001 | 0 | N 45-28-00.0 | 290.3 | 322.4 | 215.0 |
| RENFREW | | | ON CA A | 97787 | 0 | W 76-41-00.0 | 107.6 | 107.4 | |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| WTVU-LP | CP | 22o | BPTTL20010712AFS | 40.40 | 105 | N 43-03-30.0 | 239.9 | 315.2 | 197.0 |
| SYRACUSE | | | NY US B | 617 | DA 223 | W 76-10-00.0 | 57.6 | 118.2 | |
| Eligible for Class A status | | | | | | | | | |
| W22CS | LIC | 22- | BLTTL20030918AAO | 0.130 | 815 | N 43-26-37.0 | 166.4 | 123.8 | |
| WINDSOR | | | VT US A | 130222 | DA 969 | W 72-27-16.0 | 346.6 | | |
| WLWC | CP | D22 | BPCDT19991028AFL | 350.0 | 203 | N 41-46-39.0 | 152.7 | 341.8 | 288.0 |
| NEW BEDFORD | | | MA US VU | 3978 DABT | 229 | W 70-55-41.0 | 334.0 | 53.85 | |
| WFVX-LP | APP | 22- | BPTTL20040506ABL | 150.0 | 323 | N 44-45-45.0 | 84.0 | 338.2 | |
| BANGOR | | | ME US C | 15287 | DA 365 | W 68-33-58.0 | 267.0 | | |
| NEW-DT | APP | D22o | BPFS20041020ABL | 0.200 | 100 | N 44-20-00.0 | 266.6 | 267.7 | 283.0 |
| GANANOQUE | | | ON CA A | 163392 | 191 | W 76-10-00.0 | 84.2 | -15.3 | SHORT |
| no_call | | D22 | | 0.060 | 100 | N 44-20-00.0 | 266.6 | 267.7 | 283.0 |
| GANANOQUE | | | ON CA A | 0 | 0 | W 76-10-00.0 | 84.2 | -15.3 | SHORT |
| Assumed class maximum ERP/HAAT | | | | | | | | | |

## Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

### U.S. and Canadian Allocation Conditions for WCAX-DT as Channel D22

| Call / City | Stat | Chanl | File number / St Co Clas | Pac. | ERP / ID | HAAT / AMSL | Latitude / Longitude | Br-to / -from | Dist / Mrgn | Reqd / Flag |
|---|---|---|---|---|---|---|---|---|---|---|
| CBLFT-14 | APP | D22o | BPFS20041021AAQ | | 75.00 | 300 | N 44-17-22.0 | 266.1 | 293.1 | 288.0 |
| KINGSTON | | | ON CA VU | 163435 | | 405 | W 76-28-50.0 | 83.5 | 5.108 | CLOSE |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | | |
| CBOT-5 | APP | D22o | BPFS20041021ABN | | 0.200 | 100 | N 45-05-18.0 | 281.0 | 387.3 | 283.0 |
| MCARTHUR'S MILLS | | | ON CA A | 163458 | | 460 | W 77-38-50.0 | 97.6 | 104.3 | |
| CBOT-5 | | D22 | | | 0.040 | 100 | N 45-05-18.0 | 281.0 | 387.3 | 283.0 |
| MCARTHUR'S MILLS | | | ON CA A | | 0 | 0 | W 77-38-50.0 | 97.6 | 104.3 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | | |
| NEW-DT | APP | D22 | BPFS20041022ABK | | 0.200 | 100 | N 45-28-00.0 | 290.3 | 322.4 | 283.0 |
| RENFREW | | | ON CA A | 163509 | | 254 | W 76-41-00.0 | 107.6 | 39.36 | |
| no_call | | D22 | | | 0.040 | 100 | N 45-28-00.0 | 290.3 | 322.4 | 283.0 |
| RENFREW | | | ON CA A | | 0 | 0 | W 76-41-00.0 | 107.6 | 39.36 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | | |
| NEW-DT | APP | D22o | BPFS20041026ABR | | 0.200 | 100 | N 45-35-00.0 | 300.8 | 236.1 | 283.0 |
| BUCKINGHAM | | | QU CA A | 163644 | | 240 | W 75-25-00.0 | 119.0 | -46.9 | SHORT |
| no_call | | D22 | | | 0.040 | 100 | N 45-35-00.0 | 300.8 | 236.1 | 283.0 |
| BUCKINGHAM | | | QU CA A | | 0 | 0 | W 75-25-00.0 | 119.0 | -46.9 | SHORT |
| Assumed class maximum ERP/HAAT | | | | | | | | | | |
| NEW-DT | APP | D22o | BPFS20041027AAE | | 0.200 | 100 | N 46-23-00.0 | 38.9 | 268.6 | 283.0 |
| LAC-ETCHEMIN | | | QU CA A | 163708 | | 483 | W 70-37-00.0 | 220.5 | -14.4 | SHORT |
| no_call | | D22 | | | 0.040 | 100 | N 46-23-00.0 | 38.9 | 268.6 | 283.0 |
| LAC-ETCHEMIN | | | QU CA A | | 0 | 0 | W 70-37-00.0 | 220.5 | -14.4 | SHORT |
| Assumed class maximum ERP/HAAT | | | | | | | | | | |
| CBFT-9 | APP | D22o | BPFS20041027ABA | | 4.000 | 150 | N 46-46-23.0 | 323.1 | 316.3 | 264.0 |
| MONT-ST-MICHEL | | | QU CA B | 163730 | | 463 | W 75-18-24.0 | 141.3 | 52.29 | |
| CBFT-9 | | D22 | | | 0.800 | 150 | N 46-46-23.0 | 323.1 | 316.3 | 264.0 |
| MONT-ST-MICHEL | | | QU CA B | | 0 | 0 | W 75-18-24.0 | 141.3 | 52.29 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | | |
| NEW-DT | APP | D22o | BPFS20041028ABF | | 4.000 | 150 | N 46-33-00.0 | 1.3 | 224.9 | 264.0 |
| SHAWINIGAN | | | QU CA B | 163803 | | 291 | W 72-45-00.0 | 181.3 | -39.1 | SHORT |
| no_call | | D22 | | | 0.800 | 150 | N 46-33-00.0 | 1.3 | 224.9 | 264.0 |
| SHAWINIGAN | | | QU CA B | | 0 | 0 | W 72-45-00.0 | 181.3 | -39.1 | SHORT |
| Assumed class maximum ERP/HAAT | | | | | | | | | | |
| WLWCDT | | D22 | | | 155.0 | 229 | N 41-46-39.0 | 152.7 | 341.8 | 288.0 |
| NEW BEDFORD | | | MA US VU | | 0 DA | 256 | W 70-55-41.0 | 334.0 | 53.85 | |
| DTV allotment to NTSC ch. 28, WLWC | | | | | | | | | | |
| WMEBDT | | D22 | | | 991.0 | 302 | N 44-45-36.0 | 84.1 | 338.1 | 295.0 |
| ORONO | | | ME US VL | | 0 DA | 395 | W 68-33-59.0 | 267.1 | 43.13 | |
| DTV allotment to NTSC ch. 12, WMEB-TV | | | | | | | | | | |

## Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

## U.S. and Canadian Allocation Conditions for WCAX-DT as Channel D22

| Call / City | Stat | Chanl | File number / St Co Clas | Fac. ID | ERP / HAAT / AMSL | Latitude / Longitude | Br-to / -from | Dist / Mrgn | Reqd / Flag |
|---|---|---|---|---|---|---|---|---|---|
| no_call | | 22 | | | 10.00 / 100 / 0 | N 46-13-00.0 / W 71-47-00.0 | 22.9 / 203.6 | 204.5 / -10.5 | 215.0 / SHORT |
| PLESSISVILLE | | | QU CA A | 0 | | | | | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| CBSNT | | D22 | | | 0.040 / 100 / 0 | N 47-39-49.0 / W 70-22-39.0 | 27.5 / 209.2 | 396.4 | |
| NOTRE-DAME-DES-MONTS | | | QU CA LP | 0 | | | | | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| 23o | | | 0.001 | 0 | N 45-31-00.0 / W 73-34-00.0 | 332.1 / 151.5 | 124.9 / 32.93 | 92.0 | |
| MONTREAL | | | QU CA A | 97842 | | | | | |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| WPFO | LIC | 23- | BLCT19990903AAH | 5000 | 331 / 416 | N 44-09-15.0 / W 70-00-37.0 | 99.5 / 281.5 | 227.5 / 106.5 | 121.0 |
| WATERVILLE | | | ME US VL | 64088 | DABT | | | | |
| WNPI-TV | CP | D23 | BPEDT20000419AAQ | 40.00 | 243 / 598 | N 44-29-29.0 / W 74-51-27.0 | 269.3 / 87.9 | 162.4 / 66.40 | 96.0 |
| NORWOOD | | | NY US C | 62137 | BT | | | | |
| WXXA-TV | LIC | 23- | BLCT20020314ABC | 3675 | 363 / 630 | N 42-37-00.0 / W 74-00-45.0 | 204.8 / 24.0 | 233.2 / 112.2 | 121.0 |
| ALBANY | | | NY US VL | 11970 | DABT | | | | |
| NEW-DT | APP | D23o | BPFS20041026ABQ | 4.000 | 150 / 438 | N 45-03-44.0 / W 72-17-54.0 | 34.3 / 214.6 | 72.24 / -18.8 | 91.0 / SHORT |
| BOLTON-EST | | | QU CA B | 163643 | | | | | |
| no_call | | D23 | | | 0.800 / 150 / 0 | N 45-03-44.0 / W 72-17-54.0 | 34.3 / 214.6 | 72.24 / -18.8 | 91.0 / SHORT |
| BOLTON-EST | | | QU CA B | 0 | | | | | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| NEW-DT | APP | D23o | BPFS20041028ABW | 4.000 | 150 / 165 | N 46-03-00.0 / W 73-07-00.0 | 352.2 / 172.0 | 170.9 / 79.94 | 91.0 |
| SOREL | | | QU CA B | 163815 | | | | | |
| no_call | | D23 | | | 0.800 / 150 / 0 | N 46-03-00.0 / W 73-07-00.0 | 352.2 / 172.0 | 170.9 / 79.94 | 91.0 |
| SOREL | | | QU CA B | 0 | | | | | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| CBVT-9 | APP | D23o | BPFS20041028ADQ | 4.000 | 150 / 538 | N 46-06-53.0 / W 71-24-24.0 | 31.5 / 212.5 | 208.2 / 117.2 | 91.0 |
| THETFORD-MINES | | | QU CA B | 163847 | | | | | |
| CBVT-9 | | D23 | | | 0.800 / 150 / 0 | N 46-06-53.0 / W 71-24-24.0 | 31.5 / 212.5 | 208.2 / 117.2 | 91.0 |
| THETFORD-MINES | | | QU CA B | 0 | | | | | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| WNPIDT | | D23 | | | 50.00 / 243 / 0 DA | N 44-29-30.0 / W 74-51-29.0 | 269.3 / 87.9 | 162.4 / 66.44 | 96.0 |
| NORWOOD | | | NY US C | | | 599 | | | |
| DTV allotment to NTSC ch. 18, WNPI-TV | | | | | | | | | |
| no_call | | 23 | | | 100.0 / 150 / 0 | N 45-47-00.0 / W 74-00-00.0 | 326.8 / 146.0 | 167.9 / 72.86 | 95.0 |
| ST-JEROME | | | QU CA B | 0 | | | | | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |

# Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

## U.S. and Canadian Allocation Conditions for WCAX-DT as Channel D22

| Call / City | Stat | Chanl | File number / St Co Class | ERP / Fac. ID | HAAT / AMSL | Latitude / Longitude | Dir-to -from | Dist / Mrgn | Reqd / Flag |
|---|---|---|---|---|---|---|---|---|---|
| CIVSTV | LIC | 24+ | | 475.0 | 584 N | 45-18-43.0 | 27.1 | 98.32 | 95.0 |
| SHERBROOKE | | | QU CA C | 97886 | 0 W | 72-14-32.0 | 207.6 | 3.321 | CLOSE |
| | | 25o | | 0.001 | 0 N | 45-19-00.0 | 339.6 | 93.78 | 90.0 |
| ST-JEAN | | | QU CA A | 97921 | 0 W | 73-14-00.0 | 159.3 | 3.777 | CLOSE |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| WMEA-TV | LIC | 26- | BLET379 | 692.0 | 244 N | 43-25-00.0 | 126.8 | 203.3 | 97.0 |
| BIDDEFORD | | | ME US C | 39656 BT | 360 W | 70-48-09.0 | 308.2 | 106.3 | |
| | | 26o | | 0.001 | 0 N | 45-47-00.0 | 326.8 | 167.9 | 90.0 |
| ST-JEROME | | | QU CA A | 97962 | 0 W | 74-00-00.0 | 146.0 | 77.86 | |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| WMEA-TV | CP | 26- | BPET20020814ABO | 133.0 | 231 N | 43-25-00.0 | 126.8 | 203.1 | 97.0 |
| BIDDEFORD | | | ME US C | 39656 DA | 349 W | 70-48-17.0 | 308.2 | 106.1 | |
| no_call | | 26 | | 10.00 | 100 N | 45-35-00.0 | 51.6 | 192.3 | 90.0 |
| LAC-MEGANTIC | | | QU CA A | 0 | 0 W | 70-53-00.0 | 232.9 | 102.3 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| | | 29+ | | 0.001 | 0 N | 46-13-00.0 | 22.9 | 204.5 | 90.0 |
| PLESSISVILLE | | | QU CA A | 98089 | 0 W | 71-47-00.0 | 203.6 | 114.5 | |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| CFTUTV | LIC | 29o | | 10.00 | 184 N | 45-30-10.0 | 330.2 | 125.5 | 92.0 |
| MONTREAL | | | QU CA B | 98469 | 0 W | 73-36-55.0 | 149.6 | 33.45 | |
| WMUR-LP | LIC | 29- | BLTTL20000601AEG | 9.860 | 941 N | 44-09-24.0 | 114.5 | 98.08 | 97.0 |
| LITTLETON | | | NH US C | 73295 DA | 1270 W | 71-41-57.0 | 295.2 | 1.083 | CLOSE |
| Eligible for Class A status | | | | | | | | | |
| no_call | | 29 | | 100.0 | 150 N | 45-02-00.0 | 291.1 | 161.9 | 92.0 |
| CORNWALL | | | ON CA B | 0 | 0 W | 74-44-00.0 | 109.7 | 69.88 | |
| Assumed class maximum ERP/HAAT | | | | | | | | | |
| CFKSTV | LIC | 30o | | 92.30 | 613 N | 45-18-43.0 | 27.1 | 98.32 | 108.0 |
| MAGOG | | | QU CA VL | 97523 | 0 W | 72-14-32.0 | 207.6 | -9.68 | SHORT |
| No match in Canadian list, class set from ERP/HAAT | | | | | | | | | |
| CFKSTV | LIC | 30o | | 92.30 | 613 N | 45-18-43.0 | 27.1 | 98.32 | 97.0 |
| SHERBROOKE/MAGOG | | | QU CA C | 98132 | 0 W | 72-14-32.0 | 207.6 | 1.321 | CLOSE |
| WBVT-CA | APP | 30+ | BMJPTT20040310ACX | 30.00 | 359 N | 44-47-00.0 | 325.6 | 34.64 | 92.0 |
| BURLINGTON | | | VT US B | 48412 DA | 402 W | 73-03-49.0 | 145.4 | -57.4 | SHORT |
| WBVT-CA | LIC | 30- | BLTTL19990809JD | 0.070 | 125 N | 44-27-02.0 | 236.5 | 15.36 | 90.0 |
| BURLINGTON | | | VT US A | 48412 DA | 218 W | 72-58-37.0 | 56.4 | -74.6 | SHORT |

## Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

## WCAX-DT as Channel D22
## Longley-Rice Interference Study of Short-Spaced Stations (OET-69 Method)

OET-69 Interference Analysis, 1996 Census Canada; 2000 Census U.S.
tvstudy v3.0.1

Station record parameters:

| | --Modified-- | --Original-- |
|---|---|---|
| Station: | D22 WCAX-TV alot | D53 WCAX-TV alot |
| City: | BURLINGTON, VT | BURLINGTON, VT |
| Facility ID: | 46728 | 46728 |
| Coordinates: | N 44-31-36.0 | N 44-31-36.0 |
| | W 72-48-57.0 | W 72-48-57.0 |
| Height AMSL: | 1265.0 m | 1265.0 m |
| Maximum ERP: | 817 kW | 817 kW |
| Azimuth pattern: | omnidirectional | replication |
| Orientation: | 0.0 | 0.0 |
| Elevation pattern: | OET-69 generic | OET-69 generic |
| Service level: | 39.3 dBu | 42.2 dBu |

Warning - some records had missing or bad data:

| | | |
|---|---|---|
| D21 | CFCF-TV APP | Re-computed DTV baseline population |
| N21z | WXXI-TV LIC | Missing or bad azimuth pattern data, substituted omni |
| D22 | 041020AB APP | Re-computed DTV baseline population |
| D22 | 041022AB APP | Re-computed DTV baseline population |
| D22 | 041026AB APP | Re-computed DTV baseline population |
| D22 | 041027AA APP | Re-computed DTV baseline population |
| D22 | 041028AB APP | Re-computed DTV baseline population |
| D22 | CBFT-9 APP | Re-computed DTV baseline population |
| D22 | CBLFT-14 APP | Re-computed DTV baseline population |
| D23 | 041026AB APP | Below-ground AGL height, adjusted to 2m AGL |

| Protected station | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|
| N19+A W19BR CP | MONKTON, VT | 93 | 0 | 0.0 | 0 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 0 | 0 |
| D18 | WVTB.alot | ST. JOHNSBURY, VT | 0 | 0 |
| D19 | WGBH-TV LIC | BOSTON, MA | 0 | 0 |
| D19 | WSYT CP | SYRACUSE, NY | 0 | 0 |
| N19z | WCDC-TV LIC | ADAMS, MA | 0 | 0 |
| N33- | WETK LIC | BURLINGTON, VT | 2 | 2 |

**Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont**

## WCAX-DT as Channel D22
## Longley-Rice Interference Study of Short-Spaced Stations (OET-69 Method)

| Protected station | | | BasePop 1000s | IX 1000s | Change %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| N19+A | W19BR LIC | MONKTON, VT | 3 | 0 | 0.0 | 0 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 0 | 0 |
| D19 | WGBH-TV LIC | BOSTON, MA | 0 | 0 |
| D19 | WSYT CP | SYRACUSE, NY | 0 | 0 |
| N19z | WCDC-TV LIC | ADAMS, MA | 0 | 0 |
| N33- | WETK LIC | BURLINGTON, VT | 0 | 0 |

| Protected station | | | BasePop 1000s | IX 1000s | Change %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| N20- | WVTB LIC | ST. JOHNSBURY, VT | 258 | 3 | 1.2 | 2 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 2 | 2 |
| D18 | WVTB alot | ST. JOHNSBURY, VT | 0 | 0 |
| D20 | WCVB-TV LIC | BOSTON, MA | 1 | 1 |
| D20 | WMEM-TV LIC | PRESQUE ISLE, ME | 0 | 0 |
| N20+ | WUTR LIC | UTICA, NY | 0 | 0 |
| N20z | WTXX LIC | WATERBURY, CT | 0 | 0 |
| N20zA | W20BA LIC | MASSENA, NY | 0 | 0 |
| N21+ | WPXG LIC | CONCORD, NH | 0 | 0 |
| N21z | CBVT9 LIC | THETFORD-MINES, QU | 0 | 0 |
| N24+ | CIVSTV LIC | SHERBROOKE, QU | 0 | 0 |
| N28+ | WVER LIC | RUTLAND, VT | 0 | 0 |
| N35+ | CFJPTV LIC | MONTREAL, QU | 0 | 0 |
| N35- | WPME LIC | LEWISTON, ME | 0 | 0 |

| Protected station | | | BasePop 1000s | IX 1000s | Change %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| D22 | 041020AB APP | GANANOQUE, ON | 109 | 2 | 1.8 | 2 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 2 | 2 |
| D21 | WWTI LIC | WATERTOWN, NY | 1 | 1 |
| D23 | WNPI-TV CP | NORWOOD, NY | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 |

## Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

## WCAX-DT as Channel D22
## Longley-Rice Interference Study of Short-Spaced Stations (OET-69 Method)

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| N22z | WWLP LIC | SPRINGFIELD, MA | 2,803 | 109 | 3.9 | 7 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 29 | 7 |
| D21 | WSBE-TV CP | PROVIDENCE, RI | 1 | 0 |
| D22 | WLIW LIC | GARDEN CITY, NY | 150 | 13 |
| D22 | WLNC CP | NEW BEDFORD, MA | 163 | 65 |
| D22 | WNJS CP | CAMDEN, NJ | 17 | 0 |
| D23 | WFTY-TV LIC | SMITHTOWN, NY | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 9 | 0 |
| D29 | WUNI CP | WORCESTER, MA | 0 | 0 |
| D36 | WCDC-TV CP | ADAMS, MA | 0 | 0 |
| N19z | WCDC-TV LIC | ADAMS, MA | 2 | 1 |
| N20z | WTXX LIC | WATERBURY, CT | 188 | 27 |
| N21+ | WPXG LIC | CONCORD, NH | 0 | 0 |
| N21- | WLIW LIC | GARDEN CITY, NY | 9 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 3 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 45 | 0 |
| N22zA | WIVU-LP CP | SYRACUSE, NY | 0 | 0 |
| N23- | WXXA-TV LIC | ALBANY, NY | 1 | 0 |
| N24+A | WFXZ-CA LIC | BOSTON, MA | 0 | 0 |
| N24z | WEDH LIC | HARTFORD, CT | 55 | 16 |
| N26+ | WHPX LIC | NEW LONDON, CT | 31 | 4 |
| N30+ | WVIT LIC | NEW BRITAIN, CT | 82 | 0 |
| N36z | WSBE-TV LIC | PROVIDENCE, RI | 1 | 0 |

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| D22 | 041026AB APP | BUCKINGHAM, QU | 785 | 35 | 4.5 | 35 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 35 | 35 |
| D23 | WNPI-TV CP | NORWOOD, NY | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 |
| N23+ | CIVPTV LIC | CHAPEAU, QU | 0 | 0 |

**Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont**

## WCAX-DT as Channel D22
## Longley-Rice Interference Study of Short-Spaced Stations (OET-69 Method)

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| D22 | 041027AA APP | LAC-ETCHEMIN, QU | 42 | 6 | 14.3 | 5 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 5 | 5 |
| N21z | CBVT9 LIC | THETFORD-MINES, QU | 0 | 0 |
| N22z | CIVBTV LIC | RIMOUSKI, QU | 0 | 0 |

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| D22 | 041028AB APP | SHAWINIGAN, QU | 289 | 10 | 3.5 | 10 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 10 | 10 |
| N21z | CBVT9 LIC | THETFORD-MINES, QU | 0 | 0 |

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| N22n | alloc | PLESSISVILLE, QU | 73 | 18 | 24.7 | 18 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 18 | 18 |
| N15- | CIVQTV LIC | QUEBEC, QU | 0 | 0 |
| N21z | CBVT9 LIC | THETFORD-MINES, QU | 0 | 0 |

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| D23 | 041026AB APP | BOLTON-EST, QU | 259 | 3 | 1.2 | 2 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 2 | 2 |
| D23 | WNPI-TV CP | NORWOOD, NY | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 0 | 0 |
| N23- | WPFO LIC | WATERVILLE, ME | 10 | 5 |
| N23- | WXXA-TV LIC | ALBANY, NY | 0 | 0 |
| N24+ | CIVSTV LIC | SHERBROOKE, QU | 32 | 27 |

## Mount Mansfield Television, Inc. • Station WCAX • Burlington, Vermont

### WCAX-DT as Channel D22
### Longley-Rice Interference Study of Short-Spaced Stations (OET-69 Method)

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| N30+A | WBVT-CA APP | BURLINGTON, VT | 67 | 0 | 0.0 | 0 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 |
| D32 | WETK alot | BURLINGTON, VT | 0 | 0 |
| D38 | WCFE-TV CP | PLATTSBURGH, NY | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 1 | 0 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 |
| N30z | CFKSTV LIC | SHERBROOKE/MAGO, QU | 21 | 21 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 0 | 0 |

| Protected station | | | BasePop 1000s | IX Change 1000s | %Base | UniqIX 1000s |
|---|---|---|---|---|---|---|
| N30-A | WBVT-CA LIC | BURLINGTON, VT | 1 | 0 | 0.0 | 0 |

| Interfering station | | | TotlIX 1000s | UniqIX 1000s |
|---|---|---|---|---|
| D22 | WCAX-TV alot* | BURLINGTON, VT | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 |
| D32 | WETK alot | BURLINGTON, VT | 0 | 0 |
| N28+ | WVER LIC | RUTLAND, VT | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 0 | 0 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 |
| N30z | CFKSTV LIC | SHERBROOKE/MAGO, QU | 0 | 0 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 0 | 0 |

* Record parameters modified

Note:
The results of the OET-69 algorithm are dependent on the use of computer databases and complex software algorithms, which may vary between computer platforms and installations. Also, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods changes from time to time. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.

# STATION WCAX-DT ▪ TCD CHANNEL D22
# BURLINGTON, VT

## STATEMENT OF HAMMETT & EDISON, INC.
## CONSULTING ENGINEERS

## Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Mount Mansfield Television, Inc., licensee of Stations WCAX-TV and WCAX-DT, Channels N03 and D53, Burlington, Vermont, to prepare an engineering statement in support of its comments to the Commission's Seventh Further Notice of Proposed Rule Making in MB Docket No. 87-268.

## Background

In the Seventh Further Notice of Proposed Rule Making ("7FNPRM") in MB Docket No. 87-268, the Commission proposed DTV Channel 22 as the post-transition Channel for WCAX-DT, which presently operates on out-of-core Channel D53. The Commission specified tentative operating parameters on Channel D22 of 435 kilowatts ERP (DA), at 839 meters HAAT.

The proposed parameters are at variance from those specified in the International Bureau's exchange of letters with Industry Canada, namely, 443 kW ERP at 1269.4 meters AMSL/ 845.2 meters HAAT. In its letter to Industry Canada, the International Bureau agreed to "proceed to implement the changes in our database for WCAX-DT in Burlington..." A footnote allows WCAX-DT to increase ERP to 550 kW "in the event DTV channel 22 in Ottawa ever increases to post-transition class LV facilities..." Considering the years of effort that were required to agree upon those power levels, and the fact that the Commission has consistently accommodated the results of international negotiations, it makes little sense to sweep away all of that effort in this proceeding.

## 443 kW and 550 kW ERP Levels Do Not Affect other TCDs

Post-transition channel conflict studies were conducted assuming WCAX-DT to be operating as notified to Industry Canada. The only station to which any interference would be caused is WGBY-DT, Channel D22 (TCD), Springfield, Massachusetts. As shown in Figures 1 and 2, attached, post-transition channel conflict studies show, respectively, that the additional interference from WCAX-DT as Channel D22 at the 443 kW and 550 kW ERP levels cause does not exceed the Commission's 0.1% allowance.* Moreover, as noted in the accompanying comments, the only station to which *any* interference is predicted, WGBY-DT, has entered into a negotiated channel agreement accepting operation of WCAX-DT at the parameters agreed upon with Industry Canada, including operation at 550 kW under the condition specified above.

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* Use of terrain profiles sampled at an interval of 0.1-kilometer, as permitted by published Commission Policy (Public Notice No. 84889, August 10, 1998), gives more accurate results and consideration using such finer-resolution parameters is requested. The OET-69 methodology includes so-called "masking" interference from other stations as well. As shown in Figures 1 and 2, the slight increases in WCAX-DT's power sought here would have no impact on the interference caused by these other stations.

## Additional ERP is Necessary to Replicate Fully Existing Analog Coverage

The increased facilities endorsed by the International Bureau's agreement with Industry Canada will enable WCAX-DT to provide more robust coverage, particularly given the rugged terrain of the Green Mountains area. Coverage calculations (2000 U.S. Census) using the mandated implementation (OET-69) show the interference-free analog coverage of WCAX-TV, Channel 3 to be 627,068 persons including cells totaling 249,023 persons reporting "dubious or unusable" results (so-called Error Code 3 cells).† Similar calculations show the post-transition interference-free DTV coverage of post-transition 550 kW facilities of WCAX-DT, Channel 22 to be 655,692 persons, but this includes cells totaling 347,413 persons reporting dubious or unusable results.

More accurate results occur when the actual signal level and interference results reported by the Irregular Terrain Model (ITM, also known as Longley-Rice) model are used, instead, as is done in the ITM implementation used in OET Bulletin No. 72, and when depression angles are correctly calculated. When this more accurate comparison of interference-free coverage is made, it is apparent that the actual coverage of the station *decreases* from 567,700 persons in analog to only 558,241 persons in digital, assuming the 550 kW facilities. Even at 550 kW, the predicted coverage of WCAX-DT on Channel 22 falls short of replicating its analog coverage.

Since the agreement with Industry Canada contemplates increased facilities for CBOFT-DT, Channel D22, Ottawa, Ontario, as a condition for any such increase to 550 kW by WCAX-DT, even the foregoing calculations overstate WCAX-DT's interference-free coverage at 550 kW. In short, analysis using the more accurate implementation of the ITM indicates that an effective radiated power of *at least* 550 kW would be required to serve the same number of viewers post-transition as are presently being served by the analog facility of WCAX-TV. The power level negotiated by the International Bureau thus already left WCAX-DT with less than robust coverage, and should not be further reduced.

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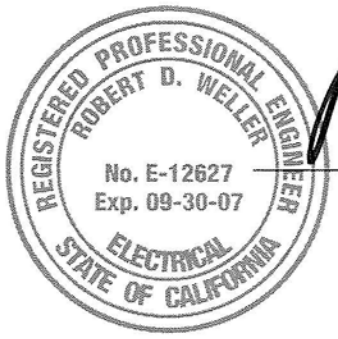
† NTIS PB82-217977, "A Guide to the Use of the ITS Irregular Terrain Model in the Area Prediction Mode," p. 77, April 1982.

## List of Figures

In carrying out these engineering studies, the following attached figures were prepared under my direct supervision:

1. Channel selection study for WCAX-DT as D22 at 443 kW ERP
2. Channel selection study for WCAX-DT as D22 at 550 kW ERP.




Robert D. Weller, P.E.

January 24, 2007

# Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 443 kW ERP Omni, Channel D22

OET-69 Interference Analysis, 2000 Census
tvstudy v3.2.12

Channel-election conflict study, in-core only, DTV protection only

This interference study is based on 2.00 x 2.00 kilometer cells and terrain profiles with 10.0 points per kilometer. FCC processing using these finer-resolution parameters is hereby requested, pursuant to the Commission's August 10, 1998, Public Notice, "Additional Application Processing Guidelines for DTV."

Before case parameters:
(same as original below)

After case parameters:

| | --Modified-- | --Original-- |
|---|---|---|
| Station: | D22 WCAX-TV TCD | D22 WCAX-TV TCD |
| City: | BURLINGTON, VT | BURLINGTON, VT |
| Facility ID: | 46728 | 46728 |
| Coordinates: | N 44-31-32.0 | N 44-31-32.0 |
| | W 72-48-58.0 | W 72-48-58.0 |
| Height AMSL: | 1269.4 m | 1263.0 m |
| Maximum ERP: | 443 kW | 435 kW |
| Azimuth pattern: | omnidirectional | D53-VTBURLINGTO_22 |
| Orientation: | | 0.0 |
| Elevation pattern: | OET-69 generic | OET-69 generic |
| Service level: | 39.5 dBu | 39.5 dBu |

Note:
N21z WXXI-TV LIC omnidirectional operation was substituted for inadequate azimuth pattern data, the effect of which is typically to overstate any potential interference effects.

| | | | | Before | | | After | | |
|---|---|---|---|---|---|---|---|---|---|
| Protected station | | | Base Pop | IX Change | %Base | IX Change | %Base | %Chng |
| D22 | WGBY-TV TCD | SPRINGFIELD, MA | 2,057,961 | -102,653 | -5.0 | -102,406 | -5.0 | 0.01 |

| | | | Before | | After | |
|---|---|---|---|---|---|---|
| Interfering station | | | Total IX | Unique IX | Total IX | Unique IX |
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 14,536 | 3,489 | 15,201 | 3,736 |
| D21 | WSBE-TV LIC | PROVIDENCE, RI | 1,752 | 0 | 1,752 | 0 |
| D22 | WLIW LIC | GARDEN CITY, NY | 16,697 | 11,525 | 16,697 | 11,525 |
| D22 | WLWC LIC | NEW BEDFORD, MA | 149,418 | 68,375 | 149,418 | 68,375 |
| D22 | WNJS CP | CAMDEN, NJ | 0 | 0 | 0 | 0 |
| D23 | WFTY-TV LIC | SMITHTOWN, NY | 0 | 0 | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 75,676 | 5,272 | 75,676 | 5,272 |
| N21+ | WPXG LIC | CONCORD, NH | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 209 | 0 | 209 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 3,210 | 409 | 3,210 | 409 |
| N22zA | WTVU-LP LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N23- | WXXA-TV LIC | ALBANY, NY | 52 | 0 | 52 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 443 kW ERP Omni, Channel D22

| | | | | Before | | | After | | |
|---|---|---|---|---|---|---|---|---|---|
| Protected station | | | Base Pop | IX Change | %Base | IX Change | %Base | %Chng |
| D22 | WLWC TCD | NEW BEDFORD, MA | 4,134,579 | -127,948 | -3.1 | -127,948 | -3.1 | 0.00 |

| | | | Before | | After | |
|---|---|---|---|---|---|---|
| Interfering station | | | Total IX | Unique IX | Total IX | Unique IX |
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D21 | WSBE-TV LIC | PROVIDENCE, RI | 4,722 | 4,722 | 4,722 | 4,722 |
| D22 | WLIW LIC | GARDEN CITY, NY | 497 | 497 | 497 | 497 |
| D22 | WNJS CP | CAMDEN, NJ | 0 | 0 | 0 | 0 |
| D23 | WFTY-TV LIC | SMITHTOWN, NY | 0 | 0 | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 353,295 | 353,295 | 353,295 | 353,295 |
| N21+ | WPXG LIC | CONCORD, NH | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |

| | | | | Before | | | After | | |
|---|---|---|---|---|---|---|---|---|---|
| Protected station | | | Base Pop | IX Change | %Base | IX Change | %Base | %Chng |
| D23 | WNPI-TV TCD | NORWOOD, NY | 159,897 | -912 | -0.6 | -912 | -0.6 | 0.00 |

| | | | Before | | After | |
|---|---|---|---|---|---|---|
| Interfering station | | | Total IX | Unique IX | Total IX | Unique IX |
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 0 | 0 | 0 | 0 |
| N22zA | WTVU-LP LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N23+ | CIVPTV LIC | CHAPEAU, QU | 60 | 0 | 60 | 0 |
| N23- | WXXA-TV LIC | ALBANY, NY | 2,007 | 1,947 | 2,007 | 1,947 |
| N23z | WNLO LIC | BUFFALO, NY | 0 | 0 | 0 | 0 |
| N24z | CICOTV24 LIC | OTTAWA, ON | 0 | 0 | 0 | 0 |

| | | | | Before | | | After | | |
|---|---|---|---|---|---|---|---|---|---|
| Protected station | | | Base Pop | IX Change | %Base | IX Change | %Base | %Chng |
| N14+A | W14CK LIC | NEWPORT, VT | 24,847 | 3,546 | 14.3 | 3,546 | 14.3 | 0.00 |

| | | | Before | | After | |
|---|---|---|---|---|---|---|
| Interfering station | | | Total IX | Unique IX | Total IX | Unique IX |
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D14 | WPTZ CP | NORTH POLE, NY | 3,546 | 3,546 | 3,546 | 3,546 |
| D14 | WVII-TV CP | BANGOR, ME | 0 | 0 | 0 | 0 |
| D18 | WVTB LIC | ST. JOHNSBURY, VT | 0 | 0 | 0 | 0 |
| N14zL | W14BU LIC | MASSENA, NY | 0 | 0 | 0 | 0 |
| N29-A | WMUR-LP LIC | LITTLETON, NH | 0 | 0 | 0 | 0 |
| N29z | CFTUTV LIC | MONTREAL, QU | 0 | 0 | 0 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 443 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N19+A | W19BR LIC | MONKTON, VT | 95,006 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D18 | WVTB LIC | ST. JOHNSBURY, VT | 0 | 0 | 0 | 0 |
| D19 | WGBH-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N18+L | W18AE LIC | KILLINGTON, VT | 0 | 0 | 0 | 0 |
| N19z | WCDC-TV LIC | ADAMS, MA | 0 | 0 | 0 | 0 |
| N20- | WVTB LIC | ST. JOHNSBURY, VT | 0 | 0 | 0 | 0 |
| N33- | WETK LIC | BURLINGTON, VT | 241 | 241 | 241 | 241 |

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N22zA | WTVU-LP APP | SYRACUSE, NY | 402,129 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| D21 | WWTI LIC | WATERTOWN, NY | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D25 | WCNY-TV LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N21z | WXXI-TV LIC | ROCHESTER, NY | 0 | 0 | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 0 | 0 | 0 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 443 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N22zA | WTVU-LP APP | SYRACUSE, NY | 402,129 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| D21 | WWTI LIC | WATERTOWN, NY | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D25 | WCNY-TV LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N21z | WXXI-TV LIC | ROCHESTER, NY | 0 | 0 | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 0 | 0 | 0 | 0 |

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N22zA | WTVU-LP LIC | SYRACUSE, NY | 369,473 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| D21 | WWTI LIC | WATERTOWN, NY | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D25 | WCNY-TV LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N21z | WXXI-TV LIC | ROCHESTER, NY | 0 | 0 | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 0 | 0 | 0 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 443 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N30+A | WBVT-CA APP | BURLINGTON, VT | 65,237 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 | 0 | 0 |
| D32 | WETK LIC | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D38 | WCFE-TV CP | PLATTSBURGH, NY | 0 | 0 | 0 | 0 |
| N29z | CFTUTV LIC | MONTREAL, QU | 0 | 0 | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 619 | 220 | 619 | 220 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N30z | CFKSTV LIC | MAGOG, QU | 13,738 | 13,295 | 13,738 | 13,295 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 358 | 0 | 358 | 0 |


| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N30+A | WBVT-CA APP | BURLINGTON, VT | 65,237 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 | 0 | 0 |
| D32 | WETK LIC | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D38 | WCFE-TV CP | PLATTSBURGH, NY | 0 | 0 | 0 | 0 |
| N29z | CFTUTV LIC | MONTREAL, QU | 0 | 0 | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 619 | 220 | 619 | 220 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N30z | CFKSTV LIC | MAGOG, QU | 13,738 | 13,295 | 13,738 | 13,295 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 358 | 0 | 358 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 443 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N30-A | WBVT-CA LIC | BURLINGTON, VT | 294 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 | 0 | 0 |
| D32 | WETK LIC | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 0 | 0 | 0 | 0 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N30z | CFKSTV LIC | MAGOG, QU | 0 | 0 | 0 | 0 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 0 | 0 | 0 | 0 |

* Record parameters modified

Note:
The results of the OET-69 algorithm are dependent on the use of computer databases and complex software algorithms, which may vary between computer platforms and installations. Also, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods changes from time to time. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 550 kW ERP Omni, Channel D22

OET-69 Interference Analysis, 2000 Census
tvstudy v3.2.12

Channel-election conflict study, in-core only, DTV protection only

This interference study is based on 2.00 x 2.00 kilometer cells and terrain profiles with 10.0 points per kilometer. FCC processing using these finer-resolution parameters is hereby requested, pursuant to the Commission's August 10, 1998, Public Notice, "Additional Application Processing Guidelines for DTV."

Before case parameters:
(same as original below)

After case parameters:

| | --Modified-- | --Original-- |
|---|---|---|
| Station: | D22 WCAX-TV TCD | D22 WCAX-TV TCD |
| City: | BURLINGTON, VT | BURLINGTON, VT |
| Facility ID: | 46728 | 46728 |
| Coordinates: | N 44-31-32.0 | N 44-31-32.0 |
| | W 72-48-58.0 | W 72-48-58.0 |
| Height AMSL: | 1269.4 m | 1263.0 m |
| Maximum ERP: | 550 kW | 435 kW |
| Azimuth pattern: | omnidirectional | D53-VTBURLINGTO_22 |
| Orientation: | | 0.0 |
| Elevation pattern: | OET-69 generic | OET-69 generic |
| Service level: | 39.5 dBu | 39.5 dBu |

Note:
N21z WXXI-TV LIC omnidirectional operation was substituted for inadequate azimuth pattern data, the effect of which is typically to overstate any potential interference effects.

| | | | | Before | | | After | | |
|---|---|---|---|---|---|---|---|---|---|
| Protected station | | | Base Pop | IX Change | %Base | IX Change | %Base | %Chng |
| D22 | WGBY-TV TCD | SPRINGFIELD, MA | 2,057,961 | -102,653 | -5.0 | -101,405 | -4.9 | 0.06 |

| | | | Before | | After | |
|---|---|---|---|---|---|---|
| Interfering station | | | Total IX | Unique IX | Total IX | Unique IX |
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 14,536 | 3,489 | 19,357 | 4,737 |
| D21 | WSBE-TV LIC | PROVIDENCE, RI | 1,752 | 0 | 1,752 | 0 |
| D22 | WLIW LIC | GARDEN CITY, NY | 16,697 | 11,525 | 16,697 | 11,525 |
| D22 | WLWC LIC | NEW BEDFORD, MA | 149,418 | 68,375 | 149,418 | 66,333 |
| D22 | WNJS CP | CAMDEN, NJ | 0 | 0 | 0 | 0 |
| D23 | WFTY-TV LIC | SMITHTOWN, NY | 0 | 0 | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 75,676 | 5,272 | 75,676 | 5,272 |
| N21+ | WPXG LIC | CONCORD, NH | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 209 | 0 | 209 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 3,210 | 409 | 3,210 | 409 |
| N22zA | WTVU-LP LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N23- | WXXA-TV LIC | ALBANY, NY | 52 | 0 | 52 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 550 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| D22 | WLWC TCD | NEW BEDFORD, MA | 4,134,579 | -127,948 | -3.1 | -127,948 | -3.1 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D21 | WSBE-TV LIC | PROVIDENCE, RI | 4,722 | 4,722 | 4,722 | 4,722 |
| D22 | WLIW LIC | GARDEN CITY, NY | 497 | 497 | 497 | 497 |
| D22 | WNJS CP | CAMDEN, NJ | 0 | 0 | 0 | 0 |
| D23 | WFTY-TV LIC | SMITHTOWN, NY | 0 | 0 | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 353,295 | 353,295 | 353,295 | 353,295 |
| N21+ | WPXG LIC | CONCORD, NH | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| D23 | WNPI-TV TCD | NORWOOD, NY | 159,897 | -912 | -0.6 | -912 | -0.6 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D23 | WUTF-TV LIC | MARLBOROUGH, MA | 0 | 0 | 0 | 0 |
| N22zA | WTVU-LP LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N23+ | CIVPTV LIC | CHAPEAU, QU | 60 | 0 | 60 | 0 |
| N23- | WXXA-TV LIC | ALBANY, NY | 2,007 | 1,947 | 2,007 | 1,947 |
| N23z | WNLO LIC | BUFFALO, NY | 0 | 0 | 0 | 0 |
| N24z | CICOTV24 LIC | OTTAWA, ON | 0 | 0 | 0 | 0 |

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N14+A | W14CK LIC | NEWPORT, VT | 24,847 | 3,546 | 14.3 | 3,546 | 14.3 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D14 | WPTZ CP | NORTH POLE, NY | 3,546 | 3,546 | 3,546 | 3,546 |
| D14 | WVII-TV CP | BANGOR, ME | 0 | 0 | 0 | 0 |
| D18 | WVTB LIC | ST. JOHNSBURY, VT | 0 | 0 | 0 | 0 |
| N14zL | W14BU LIC | MASSENA, NY | 0 | 0 | 0 | 0 |
| N29-A | WMUR-LP LIC | LITTLETON, NH | 0 | 0 | 0 | 0 |
| N29z | CFTUTV LIC | MONTREAL, QU | 0 | 0 | 0 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 550 kW ERP Omni, Channel D22

| Protected station | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|
| N19+A W19BR LIC | MONKTON, VT | 95,006 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D18 | WVTB LIC | ST. JOHNSBURY, VT | 0 | 0 | 0 | 0 |
| D19 | WGBH-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N18+L | W18AE LIC | KILLINGTON, VT | 0 | 0 | 0 | 0 |
| N19z | WCDC-TV LIC | ADAMS, MA | 0 | 0 | 0 | 0 |
| N20- | WVTB LIC | ST. JOHNSBURY, VT | 0 | 0 | 0 | 0 |
| N33- | WETK LIC | BURLINGTON, VT | 241 | 241 | 241 | 241 |

| Protected station | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|
| N22zA WTVU-LP APP | SYRACUSE, NY | 402,129 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| D21 | WWTI LIC | WATERTOWN, NY | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D25 | WCNY-TV LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N21z | WXXI-TV LIC | ROCHESTER, NY | 0 | 0 | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 0 | 0 | 0 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 550 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N22zA | WTVU-LP APP | SYRACUSE, NY | 402,129 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| D21 | WWTI LIC | WATERTOWN, NY | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D25 | WCNY-TV LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N21z | WXXI-TV LIC | ROCHESTER, NY | 0 | 0 | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 0 | 0 | 0 | 0 |

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N22zA | WTVU-LP LIC | SYRACUSE, NY | 369,473 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D19 | WSYT LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| D21 | WWTI LIC | WATERTOWN, NY | 0 | 0 | 0 | 0 |
| D22 | CBOFT-DT GNT | OTTAWA, ON | 0 | 0 | 0 | 0 |
| D25 | WCNY-TV LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N21z | WXXI-TV LIC | ROCHESTER, NY | 0 | 0 | 0 | 0 |
| N22+ | CHEXTV2 LIC | OSHAWA, ON | 0 | 0 | 0 | 0 |
| N22+A | W22BN LIC | DANBURY, CT | 0 | 0 | 0 | 0 |
| N22+A | WMBQ-CA LIC | CRANFORD, NJ | 0 | 0 | 0 | 0 |
| N22- | WYOU LIC | SCRANTON, PA | 0 | 0 | 0 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 550 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N30+A | WBVT-CA APP | BURLINGTON, VT | 65,237 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 | 0 | 0 |
| D32 | WETK LIC | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D38 | WCFE-TV CP | PLATTSBURGH, NY | 0 | 0 | 0 | 0 |
| N29z | CFTUTV LIC | MONTREAL, QU | 0 | 0 | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 619 | 220 | 619 | 220 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N30z | CFKSTV LIC | MAGOG, QU | 13,738 | 13,295 | 13,738 | 13,295 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 358 | 0 | 358 | 0 |


| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N30+A | WBVT-CA APP | BURLINGTON, VT | 65,237 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 | 0 | 0 |
| D32 | WETK LIC | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D38 | WCFE-TV CP | PLATTSBURGH, NY | 0 | 0 | 0 | 0 |
| N29z | CFTUTV LIC | MONTREAL, QU | 0 | 0 | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 619 | 220 | 619 | 220 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N30z | CFKSTV LIC | MAGOG, QU | 13,738 | 13,295 | 13,738 | 13,295 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 358 | 0 | 358 | 0 |

## Station WCAX-DT • TCD Channel D22 • Burlington, Vermont

## Results of OET-69 Channel Conflict Study
## WCAX-DT at 550 kW ERP Omni, Channel D22

| Protected station | | | Base Pop | Before IX Change | Before %Base | After IX Change | After %Base | %Chng |
|---|---|---|---|---|---|---|---|---|
| N30-A | WBVT-CA LIC | BURLINGTON, VT | 294 | 0 | 0.0 | 0 | 0.0 | 0.00 |

| Interfering station | | | Before Total IX | Before Unique IX | After Total IX | After Unique IX |
|---|---|---|---|---|---|---|
| D22 | WCAX-TV TCD* | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| D30 | WBZ-TV LIC | BOSTON, MA | 0 | 0 | 0 | 0 |
| D30 | WUTR LIC | UTICA, NY | 0 | 0 | 0 | 0 |
| D32 | WETK LIC | BURLINGTON, VT | 0 | 0 | 0 | 0 |
| N30+ | CIVOTV LIC | HULL, QU | 0 | 0 | 0 | 0 |
| N30nL | W30AJ LIC | SYRACUSE, NY | 0 | 0 | 0 | 0 |
| N30z | CFKSTV LIC | MAGOG, QU | 0 | 0 | 0 | 0 |
| N44+ | WFFF-TV CP | BURLINGTON, VT | 0 | 0 | 0 | 0 |

* Record parameters modified

Note:
The results of the OET-69 algorithm are dependent on the use of computer databases and complex software algorithms, which may vary between computer platforms and installations. Also, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods changes from time to time. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.